This study first investigates the changes of the mean and extreme temperatures and precipitation in East Asia (EA) under stabilized 1.5°C and 2°C warming conditions above preindustrial levels provided by HAPPI project. Here, five model with 925 members for 10-year historical period (2006-2015) and 1.5/2.0°C future warming scenarios (2091-2100) have been used and monthly based data have been analyzed. The results show that the spatial distribution fields over EA and domain averaged variables in HAPPI 1.5/2.0°C hindcast simulations are comparable to observations. It is found that the magnitude of mean temperature warming in EA and Korea is similar to the global mean, but for extreme temperatures local higher warming trend for minimum temperature is significant. In terms of precipitation, most subregion in EA will see more increased precipitation under 1.5/2.0°C warming compared to the global mean. These attribute for probability density function of analyzed variables to get wider with increasing mean values in 1.5/2.0°C warming conditions. As the result of vulnerability of 0.5°C additional warming from 1.5 to 2.0°C, 0.5°C additional warming contributes to the increases in extreme events and especially the impact over South Korea is slightly larger than EA. Therefore, limiting global warming by 0.5°C can help avoid the increases in extreme temperature and precipitation events in terms of intensity and frequency.

**Key words:** HAPPI 1.5/2.0, East Asia, Climate Change of mean and extreme, vulnerability

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